



Ramsey Winch Company Owner's Manual

Front Mount Electric Winch **PATRIOT 9500UT**



Layer of Cable	1	2	3	4	5
Rated Line Pull Per Layer (lbs) (kg)	9,500 4,309	7,700 3,480	6,500 2,940	5,700 2,580	4,900 2,210
Cumulative Cable Capacity Per Layer (5/16" – 8mm – dia. Cable) (m)*	15	35	60	90	105
	4	10	18	27	32

* Depends on cable being uniformly wound onto drum

Line Pull (lbs) First Layer (kg)	NO LOAD 900	2,000 1,810	4,000 2,720	6,000 3,620	8,000 4,309	9,500
Line Speed (fpm) First Layer (mpm)	33 10.0	14 4.2	11 3.3	9 2.5	7 2.1	6 1.8
Amp Draw	95	205	270	340	405	450

Congratulations

You have purchased the finest winch available in its service class. It features a highly efficient 3 stage planetary gear set which transmits torque from a series wound DC motor. A semi-automatic clutch allows free spooling for quick cable deployment and eliminates unnecessary trips back to the winch. A wireless remote allows the winch to be operated while standing up to 50 feet away. An automatic load holding brake is designed to hold the full rated capacity of the winch. It was designed and manufactured to provide you with the utmost in utility. As with any device that combines power and movement in its use, there are dangers if improperly used. At the same time, there are easier ways for getting the job done if certain precautions are taken first.

Please read this manual carefully. It contains useful ideas in obtaining the most efficient operation from your Ramsey Winch and safety procedures you need to know before beginning use. When you follow our guidelines for operation, your Ramsey Winch will give you many years of satisfying service. Thank you for choosing Ramsey. You will be glad you have one working for you.

Contents

Performance Specifications.....	Front Cover
Safety Precautions.....	2
Tips for Safe Operation	2
Techniques of Operation	3
Installation.....	4
Operating Instructions	5
Electrical Connections and Operation	5
Maintenance.....	5
Troubleshooting Guide	6
Winch Parts List	8-10
Warranty	Back Cover

Please note: Ramsey Patriot™ series winches are designed for front mount vehicle use. The winches are not designed for and should not be used in industrial applications (car haulers/carriers, wreckers, hoisting, etc.), and Ramsey does not warrant them to be suitable for such use. Ramsey makes a separate, complete line of winches for industrial/commercial use. Please contact the factory for further information.



CAUTION: Read and understand this manual before installation and operation of winch. See Safety Precautions!



Safety Precautions

To Guard against Possible Injury...

A minimum of five wraps of cable around the drum barrel is necessary to hold the rated load. Cable clamp is not designed to hold the load.

- A. Keep yourself and others a safe distance to the side of the cable when pulling under load.
- B. Do not step over a cable, or near a cable under load.
- C. Use supplied hook strap when handling hook for spooling wire rope.
- D. Do not move the vehicle to pull a load on the winch cable. This could result in cable breakage and/or winch damage.
- E. Use a heavy rag or gloves to protect hands from burrs when handling winch cable.
- F. Apply blocks to wheels when vehicle is on an incline.
- G. Winch clutch should be fully engaged when in use.
- H. Modification, alteration, or deviation to the winch should only be made by Ramsey Winch Company.
- I. Keep the duration of your pulls as short as possible. If the motor becomes uncomfortably hot to the touch, stop and let it cool for a few minutes. Do not pull more than one minute at or near rated load. Do not maintain power to the winch if the motor stalls. Electric winches are for intermittent usage and should not be used in constant duty applications.
- J. Disconnect the remote control switch from the winch when not in use. A Ramsey Part No. 282053 safety on-off switch in your vehicle is recommended.
- K. NOTE: Do not use winch in hoisting applications due to required hoist safety factors and features.
- L. Do not exceed maximum line pull ratings shown in tables. Shock loads must not exceed these ratings.
- M. To respool correctly, it is necessary to keep a slight load on the cable. This can be accomplished by (wearing gloves) holding the cable with one hand and the remote control switch with the other, starting as far back and in the center as you can, walking up keeping load on the cable as the winch is powered in. Do not allow the cable to slip through your hand and do not approach the winch too closely. Turn off the winch and repeat the procedure until all the cable except a few feet is in. Disconnect the

remote control switch and finish spooling in cable by rotating the drum by hand with clutch disengaged. On hidden winches, spool in cable under power using supplied hook strap.



Tips for Safe Operation

Don't underestimate the potential danger in winching operations. Neither should your fear them. Do learn the basic dangers and avoid them.

Observe the spooling of cable onto drum. Side pulls can cause cable to pileup at one end of the drum. To correct uneven stacking, spool out that section of the cable and move it to the other end of the drum and continue winching. Uneven spooling, which causes cable pileup, can interfere with the solenoid housing causing damage to the winch.

Store the remote control switch inside your vehicle where it will not become damaged. Inspect it before you plug it in.

When ready to begin spooling in, plug in remote control switch with clutch disengaged.

Never connect the hook back to the cable. This causes cable damage. Always use a sling or chain of suitable strength, as shown in the illustration.

Observe your winch while winching, if possible, while standing at a safe distance. If you use vehicle drive to assist, stop and get out every few feet to assure the cable is not piling up in one corner. Jamming cable can break your winch.

Do not attach tow hooks to winch mounting apparatus. They must attach to vehicle frame.

When double lining during stationary winching, the winch hook should be attached to the chassis of the vehicle.

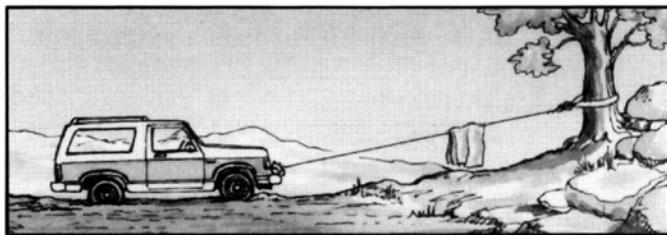
Since the greatest pulling power is achieved on the innermost layer of your winch, it is desirable to pull off as much line as you can for heavy pulls. If this is not practical, use a snatch block and double the arrangement (see illustration). Remember, a minimum of 5 wraps of cable around the drum barrel is necessary to hold the rated load.

Neat, tight spooling avoids cable binding which is caused when a load is applied and the cable is pinched between two others. If this happens, alternately power the winch in and out a few inches. Do not attempt to work a bound cable under load, free by hand.

Techniques of Operation

The best way to get acquainted with how your winch operates is to make a few test runs before you actually need to use it. Plan your test in advance. Remember you hear your winch as well as see it operate. Get to recognize the sound of a light steady pull, a heavy pull, and sounds caused by load jerking or shifting. Soon you will gain confidence in operating your winch and its use will become second nature with you.

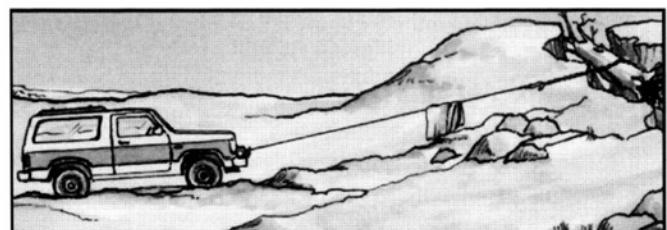
Your winch will not only pull your vehicle up a steep grade, it will also pull another vehicle or a load while your vehicle is anchored in a stationary position. The sketches on this page show you a few techniques.



For basic self-recovery, anchor to a tree or heavy rock. When anchoring to a tree, always use a tree trunk protector.



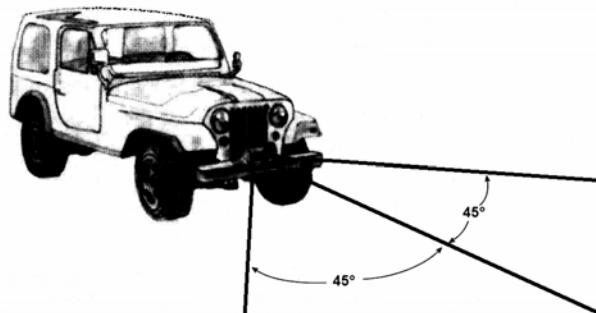
Stakes driven in solid earth and chained together make a good anchor point for self-recovery when no solid anchor point is available.



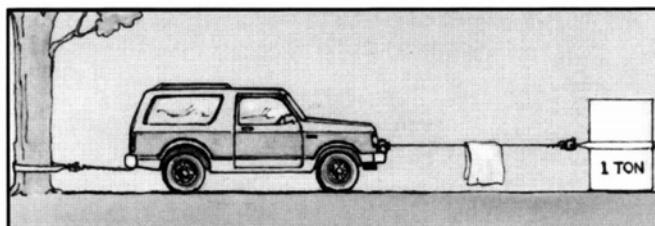
For a solid anchor, bury a log with earth or sand or place it in a deep ravine.

When pulling a heavy load, place a blanket, jacket or tarpaulin over the cable five or six feet from the hook. It will slow the snap back in the event of a broken cable. Also, open the vehicle hood for additional protection.

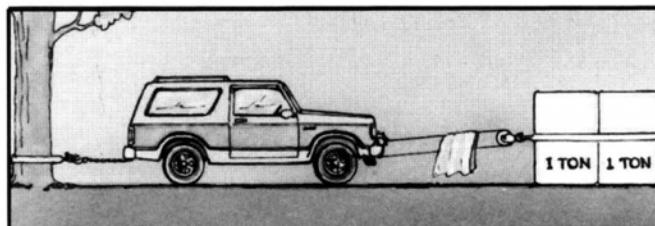
Use the vehicle wheel power to help the winch, but don't overtake the winch line. Plan your pull. You can't always hook up and pull out in one step. Examine all the areas for anchoring possibilities as well as leverage situations, direction, and goal.



Winches equipped with cable guide fairleads can pull from several directions. Pull from an angle only to straighten up the vehicle-otherwise you can damage structural members or other parts of your vehicle and cause excess cable buildup on one end of the winch drum.



For a direct pull of 2000 lbs., hitch truck to a tree or solid anchor, and take out of gear.



To double the pull, use 2-part line and tie off to chassis. Take out of gear.

Installation

The winch shown in this owner's manual is solely and exclusively designed for vehicle mounted, non-industrial applications. All other applications will void warranty.

It is very important that the winch be mounted on a flat surface so that the three major sections (the motor end, the cable drum, and the gear housing end) are properly aligned. It is recommended that Ramsey kits be used to mount the winch. They are designed to align the winch and distribute up to the full rated load evenly, to avoid possible damage to the winch or vehicle.

NOTE: If recommended mounting is not used, a kit of equal design must be used.

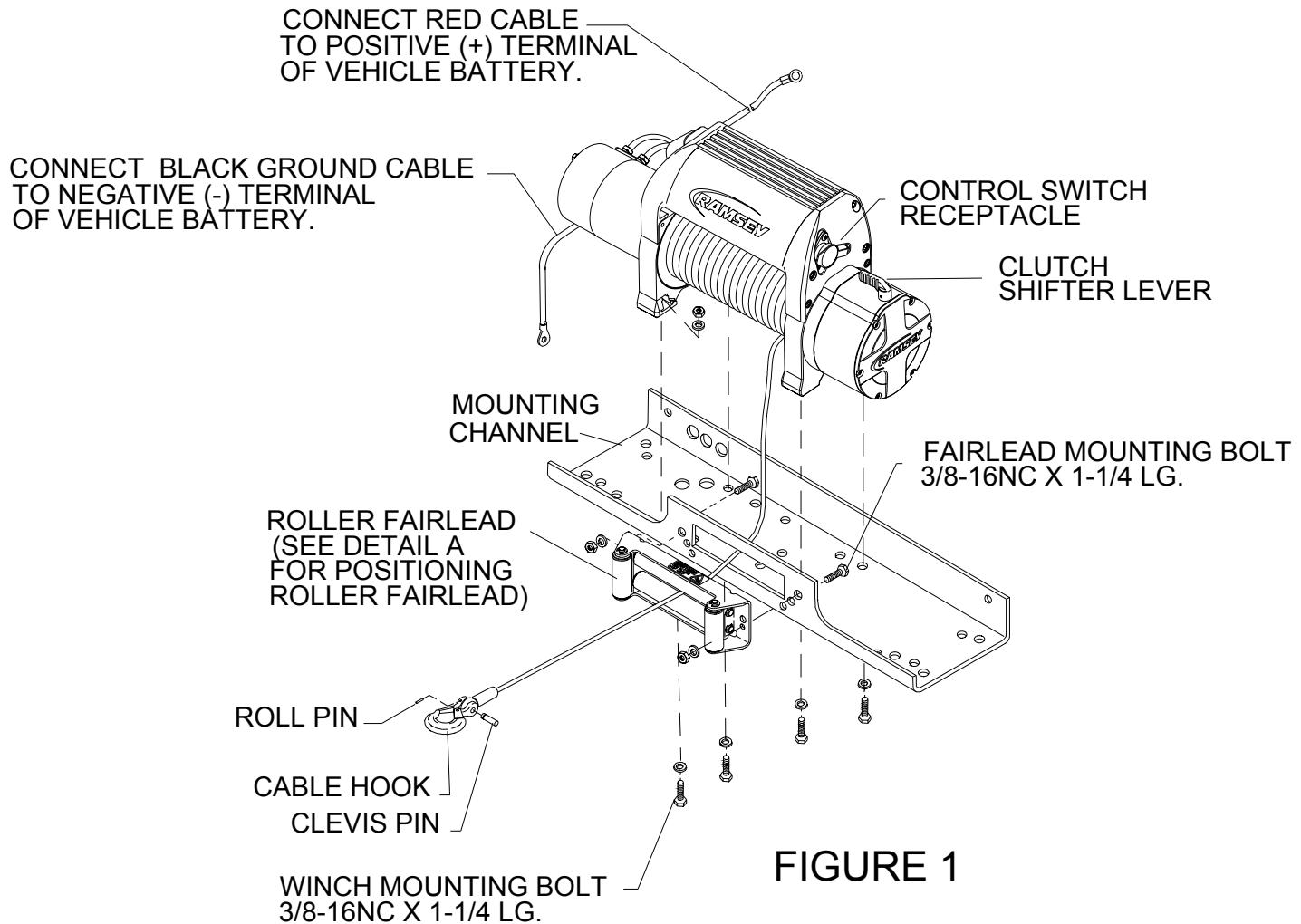
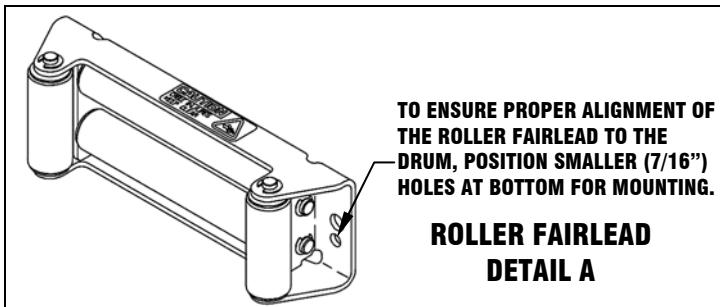


FIGURE 1

Also available for mounting the Patriot 9500 UT are the following winch mounting channels:

- #251126 short length (23.63") black
- #251127 medium length (30.00") black
- #251128 long length (36.00") black

It is recommended that Ramsey mounting channels be used with all non-Ramsey mounting.

Attach fairlead to channel using hardware furnished with winch. Attach winch to channel. Thread capscrews with lockwashers through mounting holes in channel and into winch feet (see Figure 1).

Substitution of attaching hardware items (bolts, nuts or washers) different from those supplied with your winch and mounting kit can lead to failure causing damage or serious injury (use SAE grade 5 bolts or better and torque to 34 ft.lbs.).

Place end of wire rope through fairlead and attach cable hook. Use clevis pin and cotter pin (see Figure 1).

Operating Instructions

The winch clutch allows rapid unspooling of the wire rope for hooking onto the load or anchor point. The clutch is operated by the shifter lever located on the gear housing end of the winch as follows:

1. To disengage the clutch, move the clutch shifter lever to the "DISENGAGED" position. Wire rope may now be freespooled off the drum.
2. To engage the clutch, power winch motor to reel in cable. The clutch will automatically engage and the clutch shifter lever will automatically move to the "ENGAGED" position.

Note: Slight tension on the cable may be necessary to fully engage the clutch.

Note: Clutch may be manually engaged by manually moving the clutch lever to the "ENGAGED" position. Rotation of the drum may be necessary to fully engage the clutch manually.

Caution: Insure the clutch fully engages by observing clutch shifter lever position before winching.

Caution: Stay clear of clutch lever while clutch is being automatically engaged. Disconnect the remote from the winch before operating the clutch manually.

Electrical Connections and Operations

For normal self-recovery work, your existing electrical system is adequate. Your battery must be kept in good condition. A fully charged battery and proper connections are essential. Run the vehicle engine during winching operations to keep battery charged.

Route battery cables up to battery.

Caution: Be sure battery cables are not drawn taut across any surfaces which could possibly damage them.

Connect red cable to positive (+) battery terminal. Connect black ground cable to negative (-) terminal of battery (See Figure 1).

Models Equipped with Push Button Remote Control Switch

The remote control switch is water proof. It has push buttons on either side. Make sure the motor has stopped fully before reversing. To actuate winch simply plug remote control switch into receptacle in cover of winch. Run winch forward and reverse to check directions. Snap appropriate "IN" and "OUT" disc into proper thumb cavity. **Do not leave switch plugged in when winch is not in use.**

Models Equipped with Wireless Remote Control

See Installation and Operating Instructions for Ramsey Universal Remote Control (OM-914057) included with the wireless remote.

Maintenance

All moving parts are permanently lubricated with high temperature lithium grease at the time of assembly. Under normal conditions factory lubrication will suffice.

Lubricate cable periodically using light penetrating oil. Inspect the cable for broken strands and replace if necessary. If the cable becomes worn or damaged, it must be replaced. Corrosion on electrical connections will reduce performance or may cause a short. Clean all connections especially in remote control switch and receptacle. In salty environments use a silicone sealer to protect from corrosion.

To minimize corrosion of the internal motor components that may occur due to condensation, power the winch in or out periodically. Energizing the motor will generate heat, which will help dissipate any moisture buildup in the motor. This should be performed at periodic intervals (such as with each oil change of your vehicle). **Note:** Refer to the Troubleshooting Guide if the motor has been submerged.

Cable Installation

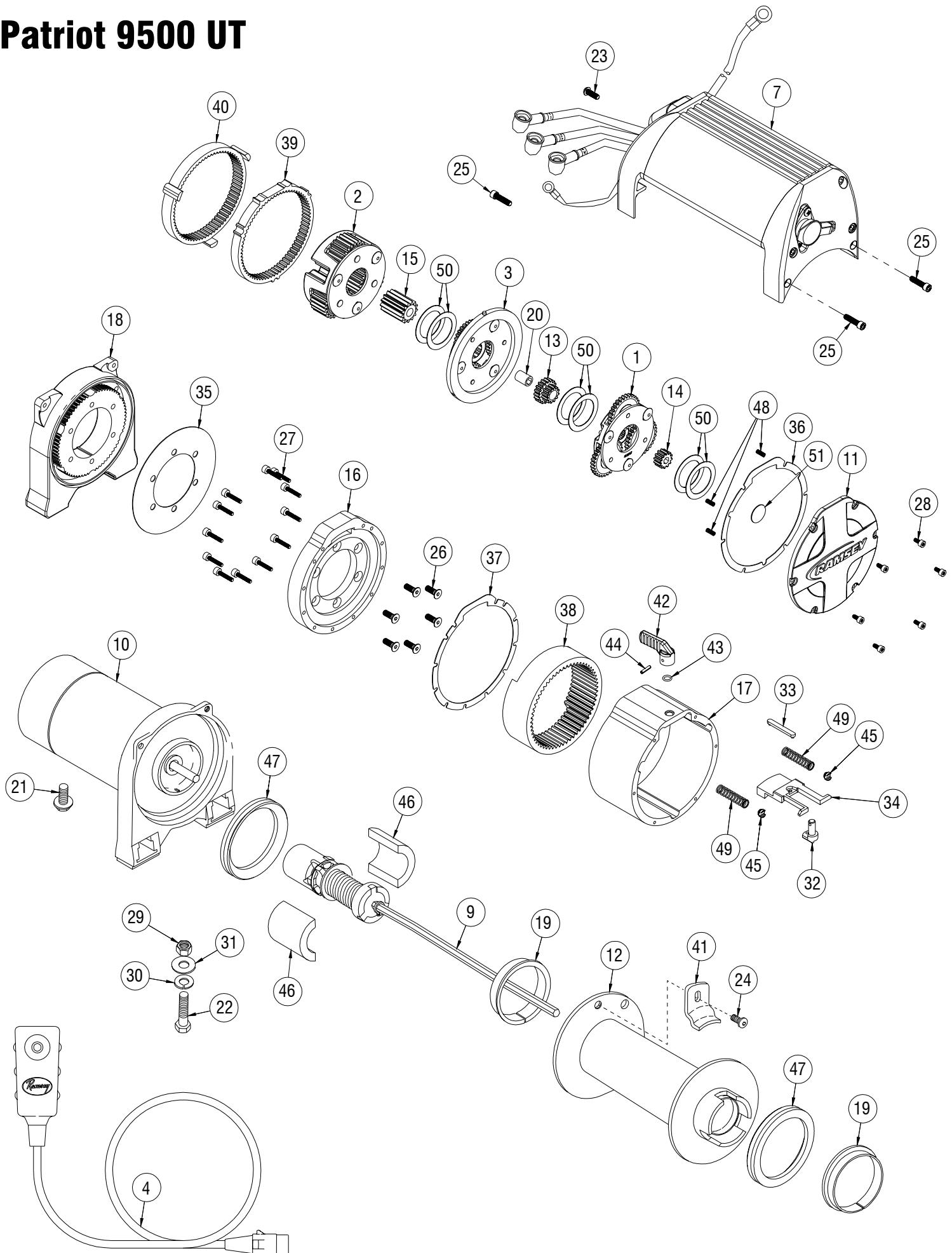
1. Unwind the new cable by rolling it out along the ground to prevent kinking.
2. Remove old cable and observe the manner in which it is attached to the cable drum flange.
3. Before installing the new cable assembly, securely wrap the end of the cable with plastic tape or similar tape to prevent fraying.
4. Position the cable drum so that the large 13/32" diameter hole in the motor end drum flange is approximately on the top.
5. Form a short bend (approximately 1/2" long) in the end of the cable. Insert the bend into the 13/32" hole in the drum flange and then carefully run the winch in the "reel in" direction approximately 3/4 revolution until the 1/4" diameter threaded hole in the drum flange is on top.
6. Secure the cable to the drum flange using cable anchor and capscrew shown in the parts drawing on page 8-9 (Item nos. 41 and 24). Securely tighten the capscrew, but do not over-tighten.
7. Wind 5 wraps of cable onto the drum. Wind on the rest of the cable by pulling in a light load to keep the tension constant. Allow the cable to swivel by using a length of chain or a swivel block between the cable hook and the load.

Troubleshooting Guide

Condition	Possible Cause	Correction
MOTOR RUNS IN ONLY ONE DIRECTION	Defective or stuck solenoid	Jar each solenoid to free contacts. Check each solenoid by applying 12 volts to coil terminal (it should make an audible click when energized).
	Defective remote control switch	Disengage winch clutch, remove remote control switch plug from the socket and jump hot pin and either of the other pins. Motor should run. Jump hot pin and the remaining pin. Motor should run.
MOTOR RUNS EXTREMELY HOT	Long period of operation	Cooling off periods are essential to prevent overheating.
	Insufficient battery	Check battery terminal voltage under load. If 10 volts or less, replace or parallel another battery to it.
MOTOR RUNS, BUT WITH INSUFFICIENT POWER, OR WITH LOW LINE SPEED.	Bad connection	Check battery cable for corrosion; clean and grease.
	Insufficient charging system	Replace with larger capacity charging system.
MOTOR RUNS, BUT DRUM DOES NOT TURN	Motor running in the reel out direction while clutch is not engaged	If motor is running in the reel in direction or clutch is engaged but symptom still exists, it will be necessary to disassemble winch to determine cause and repair.
MOTOR WILL NOT OPERATE	Defective or stuck solenoid	Jar each solenoid to free contacts. Check each solenoid by applying 12 volts to coil terminal (it should make an audible click when energized).
	Defective remote control switch	Disengage winch clutch, remove remote control switch plug from the socket and jump hot pin and either of the other pins. Motor should run. Jump hot pin and the remaining pin. Motor should run.
	Defective motor	If solenoids operate, check for voltage at armature post; replace motor.
	Loose Connections	Tighten connections on bottom side of hood and on motor.
MOTOR WATER DAMAGED	Submerged in water or water from high pressure car wash	Allow dry thoroughly, then run motor without load in short bursts to dry windings.

NOTES

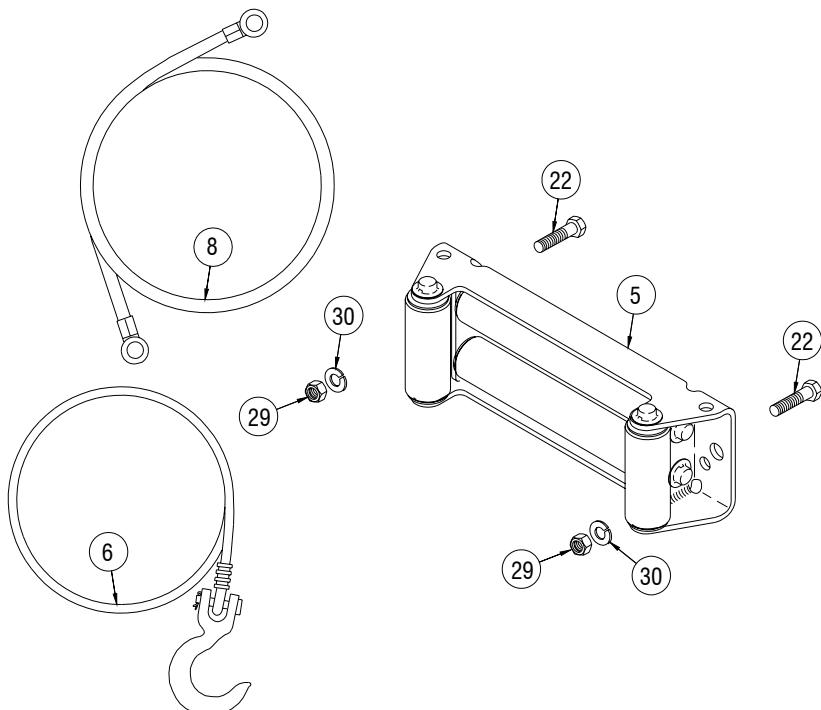
Patriot 9500 UT



Patriot 9500 UT Winch Parts List

Item No.	Qty.	Part No.	Description
1	1	247009	GEAR CARRIER ASSEMBLY – INPUT
2	1	247023	GEAR CARRIER ASSEMBLY – OUTPUT
3	1	247037	GEAR CARRIER ASSY – INTERMEDIATE
4	1	251110	SWITCH ASSEMBLY
5	1	251183	ROLLER FAIRLEAD
6	1	251210	CABLE ASSEMBLY – 5/16 DIA X 105'
7	1	278195	SOLENOID ASSEMBLY – 12V
8	1	289141	CABLE ASSEMBLY - GROUND
9	1	296181	BRAKE/INPUT SHAFT ASSEMBLY
10	1	297040	MOTOR 12V
11	1	328163	COVER-GEAR HOUSING
12	1	332219	DRUM – CABLE
13	1	334147	GEAR – INTERMEDIATE SUN
14	1	334154	GEAR – INPUT SUN
15	1	334197	GEAR – OUTPUT SUN
16	1	338361	GEAR HOUSING – OUTPUT
17	1	338362	GEAR HOUSING – INPUT
18	1	338364	END BEARING – GEAR HOUSING
19	2	412056	BUSHING – DRUM
20	1	412061	BUSHING – SHAFT
21	1	414092	CAPSCREW 5/16-18UNC X 3/8 LG HX
22	6	414316	CAPSCREW 3/8-16NC X 1-1/4 HX HD
23	1	414823	BOLT-1/4-20NC X 3/4 LG BUTTON HD
24	1	414830	BOLT-1/4-20NC X 3/8 BUTTON HD
25	3	414986	BOLT-1/4-20NC X 1 LG SOCKET HD
26	6	414861	BOLT-1/4-20NC X 3/4 LG FLAT SOC HD

Item No.	Qty.	Part No.	Description
27	12	414960	BOLT-#8-32NC X 7/8 LG. SOC HD
28	6	416208	BOLT-#8-32NC X 1/2 LG. SOCKET HD
29	6	418035	NUT 3/8-16NC HEX REG PLATED
30	6	418177	LOCKWASHER – 3/8 ID MED SECT
31	4	418181	WASHER-FLAT 3/8 ID SAE PLATED
32	1	426052	ACTUATOR
33	1	426053	LINK – CLUTCH
34	1	426056	PLUNGER – LOCKING
35	1	442227	GASKET – GEAR HSG-END BEARING
36	1	442228	GASKET – GEAR HSG/COVER
37	1	442229	GASKET – GEAR HSG/GEAR HSG
38	1	444110	GEAR – OUTPUT RING
39	1	444111	GEAR – INPUT RING
40	1	444112	GEAR – INTERMEDIATE RING
41	1	448046	CABLE ANCHOR
42	1	452007	HANDLE – CLUTCH
43	1	462064	O-RING – 5/16 ID X 1/16 THICK
44	1	470050	ROLL PIN – 1/8 DIA X 5/8 LG
45	2	472080	SPRING GUIDE
46	2	477004	RING – HALF
47	2	486082	SEAL – DRUM
48	3	494077	SPRING – DRAG
49	2	494104	SPRING – CLUTCH
50	6	518020	THRUST WASHER
51	1	518027	THRUST DISC



Wireless Remote Kit #251200

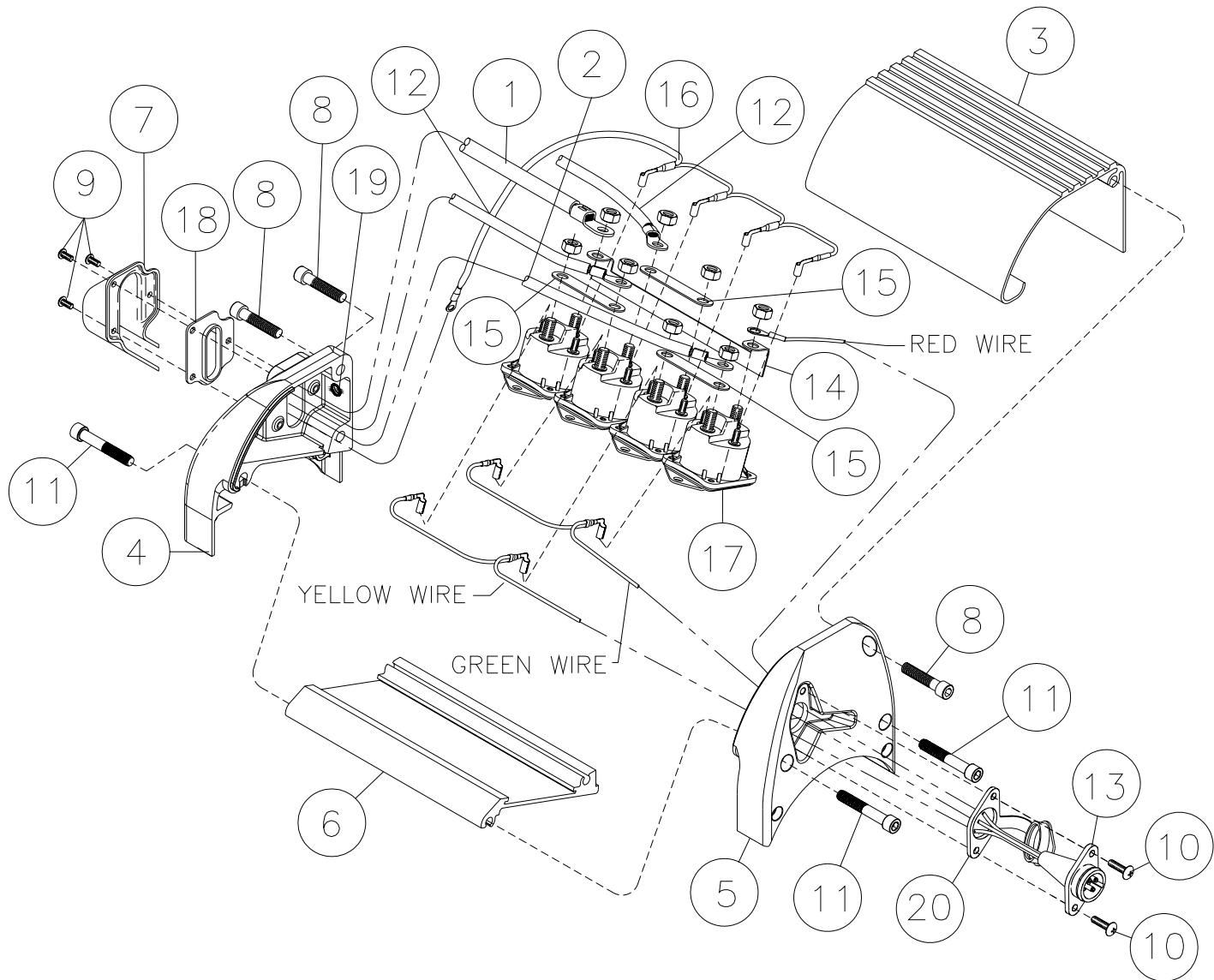
See "Installation And Operating Instructions For Ramsey Universal Front Mount Wireless Remote Control Kits" for wireless remote parts list.

Solenoid Assembly Parts List

278195 12V (PATRIOT 9500 UT)

Item No.	Qty.	Part No.	Description
1	1	289015	WIRE ASSY - BATTERY CABLE
2	1	289195	WIRE ASSY - MOTOR LEADS
3	1	682186	COVER
4	1	316107	CAP - L.H. END
5	1	316106	CAP - R.H. END
6	1	682185	CHANNEL - SOLENOID MOUNTING
7	1	413078	COVER - WIRE
8	3	414880	CAPSCREW 5/16-18NC X 1-1/2 LG SOC HD
9	3	416207	SCREW
10	2	416227	SCREW #10-24NC X 3/4 LG TRUSS HD

Item No.	Qty.	Part No.	Description
11	3	414989	CAPSCREW 5/16-18UNC X 2 LG SOC HD
12	2	289196	WIRE ASSY - MOTOR LEAD
13	1	430022	CONNECTOR
14	1	440259	STRAP
15	3	440260	STRAP
16	1	440276	WIRE ASSY - GROUND
17	4	440262	SOLENOID 12V
18	1	442222	GASKET
19	1	472047	GROMMET
20	1	482029	COVER - RECEPTACLE



NOTES

Warranty Information

Ramsey Winches are designed and built to exacting specifications. Care and skill go into every winch we make. If the need should arise, warranty procedure is outlined on the back of your self-addressed postage paid warranty card. Please read and fill out the enclosed warranty card and send it to Ramsey Winch Company. If you have problems with your winch, please follow instructions for proper service on all warranty claims.

Limited Lifetime Warranty

Ramsey Winch offers a limited lifetime warranty for each new Ramsey consumer/RV winch against manufacturing defects in workmanship and materials on all mechanical components.

Warranty registration cards for each winch must be submitted at the time of purchase or within 30 days. Warranty will only be valid for the original purchase of the winch and installed on the vehicles with which they were originally registered.

New cable assemblies are warranted against defects in workmanship and materials. No warranty applies after initial use.

All Ramsey mounting kits and other accessories carry a 1-year limited warranty against defects in material and workmanship.

Chrome finish warranted for one year against manufacturing defects. Cracking, scratching, or corrosion caused by winching not covered by warranty.

This warranty is void if winch is used in commercial/industrial applications other than front mount self-recovery.

Electrical components consisting of motors, solenoids, wiring, wire connectors and associated parts carry a 1-year limited warranty. Battery isolators carry a 90-day limited warranty.

An optional extended 2-year limited warranty for all electrical components may be purchased.

The obligation under this Warranty, statutory or otherwise, is limited to the replacement or repair at the manufacturer's factory, or at a point designated by the manufacturer, upon inspection of such part, to have been defective in material or workmanship. This Warranty does not obligate Ramsey Winch Company to bear the cost of transportation charges in connection with the replacement or repair of defective parts, nor shall it apply to a product upon which repairs or alterations have been made, unless authorized by the manufacturer, or for equipment misused, neglected, or improperly installed.

IMPORTANT NOTICE: To the fullest extent permitted by applicable law, the following are hereby excluded and disclaimed: **1. All warranties of fitness for a particular purpose; 2. All warranties of merchantability; 3. All claims for consequential or incidental damages. There are no warranties that extend beyond the description that appears on the face hereof.**

Some states do not allow the above exclusions or disclaimers in consumer transactions and as such this disclaimer/exclusion may not apply to your particular case.

To the extent such warranties of fitness for a particular purpose or merchantability are deemed to apply to this product, they exist for only so long as the express limited warranty elsewhere set forth is in existence.

Ramsey Winch Company makes no warranty in respect to accessories, same being subject to the warranties of their respective manufacturers.

Ramsey Winch Company, whose policy is one of continuous product improvement, reserves the right improve any product through changes in design and materials as it may deem desirable without being obligated to incorporate such changes in products of previous manufacture.

If field service at the request of the buyer is rendered and the fault is found not to be with Ramsey Winch Company's product, the buyer shall pay the time and expense cost of the field representative. Bills for service, labor, or other expenses which have been incurred by the buyer without express approval or authorization by Ramsey Winch Company will not be accepted.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.



Ramsey Winch Company

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